

XENOY™ XL1339 resin

Polycarbonate + PET
SABIC Innovative Plastics

Message:
Data generated in BOZ labs. High heat grade for nonchemical resistance required applications.

General Information			
Features	High Heat Resistance		
Processing Method	Injection Molding		
Physical	Nominal Value	Unit	Test Method
Specific Gravity	1.22	g/cm ³	ASTM D792
Melt Volume-Flow Rate (MVR) (265°C/1.2 kg)	4.00	cm ³ /10min	ISO 1133
Molding Shrinkage ¹			Internal Method
Flow	0.50 to 0.80	%	
Across Flow	0.50 to 0.80	%	
Water Absorption			ASTM D570
24 hr	0.10	%	
Equilibrium, 23°C	0.70	%	
Equilibrium, 50% RH	0.20	%	
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus ²	2100	MPa	ASTM D638
Tensile Strength			
Yield ³	50.0	MPa	ASTM D638
Yield	55.0	MPa	ISO 527-2/50
Break ⁴	50.0	MPa	ASTM D638
Break	40.0	MPa	ISO 527-2/50
Tensile Elongation			
Yield ⁵	5.0	%	ASTM D638
Yield	5.0	%	ISO 527-2/50
Break ⁶	110	%	ASTM D638
Break	70	%	ISO 527-2/50
Flexural Modulus			
50.0 mm Span ⁷	2100	MPa	ASTM D790
-- ⁸	2200	MPa	ISO 178
Flexural Stress			
--	80.0	MPa	ISO 178
Yield, 50.0 mm Span ⁹	94.5	MPa	ASTM D790
Poisson's Ratio	0.40		ASTM D638
Taber Abrasion Resistance (1000 Cycles, 1000 g, CS-17 Wheel)	16.0	mg	ASTM D1044

Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength ¹⁰			ISO 179/1eA
-30°C	35	kJ/m ²	
23°C	45	kJ/m ²	
Charpy Unnotched Impact Strength ¹¹			ISO 179/1eU
-30°C	No Break		
23°C	No Break		
Notched Izod Impact			
-40°C	220	J/m	ASTM D256
-30°C	250	J/m	ASTM D256
-20°C	600	J/m	ASTM D256
0°C	670	J/m	ASTM D256
23°C	700	J/m	ASTM D256
-40°C ¹²	15	kJ/m ²	ISO 180/1A
-30°C ¹³	25	kJ/m ²	ISO 180/1A
-20°C ¹⁴	35	kJ/m ²	ISO 180/1A
-10°C ¹⁵	38	kJ/m ²	ISO 180/1A
23°C ¹⁶	40	kJ/m ²	ISO 180/1A
Unnotched Izod Impact Strength ¹⁷			ISO 180/1U
-30°C	No Break		
23°C	No Break		
Thermal	Nominal Value	Unit	Test Method
Heat Deflection Temperature ¹⁸			
0.45 MPa, Unannealed, 100 mm Span	125	°C	ISO 75-2/Be
1.8 MPa, Unannealed, 100 mm Span	105	°C	ISO 75-2/Ae
Vicat Softening Temperature			
--	140	°C	ISO 306/A50
--	130	°C	ISO 306/B50
--	135	°C	ISO 306/B120
CLTE			ASTM D696
Flow : -30 to 30°C	7.6E-5	cm/cm/°C	
Transverse : -30 to 30°C	7.9E-5	cm/cm/°C	
Thermal Conductivity	0.18	W/m/K	ASTM C177
Electrical	Nominal Value	Unit	Test Method
Surface Resistivity	> 1.0E+15	ohms	ASTM D257
Volume Resistivity	> 1.0E+14	ohms · cm	ASTM D257
Dielectric Strength (3.20 mm, in Oil)	17	kV/mm	ASTM D149
Dielectric Constant			ASTM D150
50 Hz	3.30		
60 Hz	3.30		
1 MHz	3.10		
Dissipation Factor			ASTM D150

50 Hz	2.0E-3	
60 Hz	2.0E-3	
1 MHz	0.020	
Injection	Nominal Value	Unit
Drying Temperature	110	°C
Drying Time	4.0 to 6.0	hr
Drying Time, Maximum	8.0	hr
Suggested Max Moisture	0.020	%
Suggested Shot Size	50 to 80	%
Rear Temperature	243 to 266	°C
Middle Temperature	249 to 271	°C
Front Temperature	254 to 277	°C
Nozzle Temperature	254 to 271	°C
Processing (Melt) Temp	260 to 277	°C
Mold Temperature	65.6 to 87.8	°C
Back Pressure	0.345 to 0.689	MPa
Screw Speed	50 to 80	rpm
Vent Depth	0.013 to 0.020	mm
NOTE		
1.	Tensile Bar	
2.	50 mm/min	
3.	Type I, 50 mm/min	
4.	Type I, 50 mm/min	
5.	Type I, 50 mm/min	
6.	Type I, 50 mm/min	
7.	1.3 mm/min	
8.	2.0 mm/min	
9.	1.3 mm/min	
10.	80*10*4 sp=62mm	
11.	80*10*4 sp=62mm	
12.	80*10*4	
13.	80*10*4	
14.	80*10*4	
15.	80*10*4	
16.	80*10*4	
17.	80*10*4	
18.	120*10*4 mm	

The information and data on this page are provided by manufacturers and document providers. SHANGHAI SUSHENG assumes no legal liability. It is strongly recommended to verify all technical data with material suppliers before final material selection. All rights belong to the original authors. If any infringement occurs, please contact us immediately.

Recommended distributors for this material

Susheng Import & Export Trading Co.,Ltd.

Tel: +86 21 5895 8519

Phone: +86 13424755533

Email: sales@su-jiao.com

No. 215, Lianhe North Road, Fengxian District, Shanghai, China

